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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GYORFI, THOMAS A

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/716,397	Applicant(s) AKAMA, KATSUAKI	
	Examiner Thomas Gyorfi	Art Unit 2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 3-7, 9-11, 13, and 14 remain for examination. The amendment filed 8/16/10 amended claims 1, 7, & 11; and cancelled claims 2, 8, & 12.

Response to Arguments

2. Applicant's arguments filed 8/16/10 have been fully considered but they are not persuasive. Applicant argues,

The Office Action takes Official Notice that Sanchez-Herrero's HSS conforms to the 'authentication server' of the claims and for evidence relies upon 3GPP TS 29.228 - pages 8-23.

However, the Office Action does not give a clear rejection rationale for claimed transferring of a telephone number, and appears to hold this limitation as strongly suggested by the relied upon references. Claim 1 is directed to switching over from use of the first terminal equipment to the use of the second terminal equipment without changing the subscriber telephone number, and achieving the switching of the equipment terminal by:

(1) using the second terminal equipment with the same subscriber telephone number through position registration, upon receipt of an authentication request from the second terminal equipment, and

(2) using the same subscriber telephone number and the changed second terminal subscriber identification number.

Unlike Sanchez-Herrero, the present invention makes it possible for a single user to use a plurality of terminals with the same subscriber number, thus there is no description for changing a terminal equipment without changing the subscriber telephone number in Sanchez-Herrero and 3GPP Standard TS29.228.

First, Examiner's invocation of Official Notice was merely to illustrate that the specific functionality attributed to the claimed authentication server was necessarily present in the HSS of a standard GSM cellular network deployment; and furthermore that there exists evidence within Sanchez-Herrero that his HSS is no different from a conventional HSS in that respect. As for the ability to transfer phone numbers from one device to another, the Examiner observes that that functionality has been part and parcel of the GSM standard for well over a decade. Those of ordinary skill in the art would know full well wherein GSM

Art Unit: 2435

handsets comprise SIM cards, comprising all the pertinent subscriber information including *inter alia* the user's telephone number. GSM devices have been designed such that without a SIM card, the device is unidentifiable and inoperable; it is only when a SIM card is inserted into the device that it will register itself with the network and authenticate itself as the device that will respond to any calls made to the user's specific telephone number. This feature is clearly advantageous as it allows a user to upgrade one's phone as desired without sacrificing one's pre-existing subscription nor requiring one to add an additional subscription to use a second phone.¹ The Examiner has found several references attesting to the obviousness of this feature, including but not limited to "Wireless Communications Principles and Practice, 2nd Edition" (page 2, 2nd paragraph) and "GSM Cellular Phone FAQs" (page 1, "What is a SIM card?"). Even Chander acknowledges this functionality being present in a GSM system, albeit with the caveat that Chander believes that his modified method of transferring phone numbers is superior (Chander, col. 3, lines 1-5). The Examiner respectfully submits that, absent the claim limitation regarding the biometric aspect of device authentication, the independent claims do no more than describe this very simple SIM card swapping procedure.

Second, Applicant's description of Sanchez-Herrero is demonstrably incorrect, as the text makes it very clear that the very purpose of his invention is precisely to "make it possible for a single user to use a plurality of terminals with the same subscriber number". To wit: Sanchez-Herrero uses the term "public ID" as a synonym for a user's telephone number (col.

¹ The Examiner personally avers to having performed this method himself with his own cell phones and SIM card, and would be more than happy to demonstrate this functionality to the Applicant to establish that the ability to transfer a phone number from one phone to another would be blindingly obvious to one of ordinary skill in the art.

Art Unit: 2435

3, lines 1-30). Furthermore, in describing his invention, Sanchez-Herrero discloses the following at col. 5, lines 35-50:

It should be then desirable a situation wherein, without having to appeal to a solution based on multiple subscriptions per user, a given user having a single subscription in a telecommunications system (such as a mobile system, or other telecommunications system of similar characteristics regarding user identities and location information), is allowed to register into said system from different terminals simultaneously, thus having multiple registrations active simultaneously; **and wherein said user can receive calls in any of these registered terminals from other parties that have "dialled" one public-ID that is associated to said single subscription.**

(emphasis Examiner's)

Sanchez Herrero further describes his method at col. 6, lines 30-40:

Said method allows a given user to receive incoming sessions (voice calls, multimedia calls, multimedia conferences, data transfer, etc.) addressed to a public-ID of said user to be delivered to a plurality of terminals said user is presently registered with; allowing said session to be attended in the terminal with the best (or more appropriate) capabilities for said session; or simply, to be attended in the end-user terminal which is physically closest to said user.

In other words, the very improvement that Sanchez Herrero is disclosing over the baseline GSM standard is the ability to activate a plurality of devices with a single telephone number belonging to the user, in order to allow the user to make and receive calls on any or all of his devices; these teaching stand in stark contrast to Applicant's unfounded assertions to the contrary.

This leads to another point: Applicant's arguments are making it increasingly difficult for Examiner to appropriately discern what Applicant intends as the scope of his claimed invention. As noted *supra*, Applicant declares that "the present invention makes it possible for a single user to use a plurality of terminals with the same subscriber number" (amendment, page 7, second paragraph from the bottom); however, the new limitation of the independent claims recites that the first wireless terminal renounces its use when the second device registers with the network as the

Art Unit: 2435

user's new terminal equipment. Up to this point based on previous iterations of the claim language and Applicant's remarks over the course of the prosecution history, the Examiner had been interpreting the claims to primarily read on the ability to be able to use multiple devices on the network with the same telephone number; however, it is clear now that the independent claims are now limited to the case where only one phone or device may be activated at a time, and with each device activation the previous device renounces the phone number and is no longer usable as said user's device. At best, the Examiner believes it to be misleading by the Applicant to continue to insist that the claimed invention allows for a plurality of registered devices, when in fact the claims are merely describing the transfer of a telephone number from a first device to a second device. And, as previously noted, Sanchez-Herrero allows for any of the devices previously registered by the user to be de-registered as desired by the user; thus Sanchez Herrero still supports the limited use case now being claimed by the Applicant.

3. Applicant's traversal of Official Notice clearly having been found to be inadequate *supra* not only by virtue of Sanchez Herrero's teaching to the contrary combined with ample prior art suggesting the obviousness of transferring a phone number from one device to another, Examiner's previous statements of Official Notice are now taken as Applicant admitted prior art, as provided by MPEP 2144.03(c).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2435

5. Claims 1, 3-7, 9-11, 13, and 14 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which Applicant(s) regard as their invention.

Evidence that claims 1, 7, 11, and all dependents therefrom fail(s) to correspond in scope with that which Applicant(s) regard as the invention can be found in the reply filed 8/16/10. In that paper, Applicant has stated that “the present invention makes it possible to for a single user to use a plurality of terminals with the same subscriber number” (page 7, second paragraph from bottom), and this statement indicates that the invention is different from what is defined in the claim(s) because the claims now require that whenever a new device is registered to a user, the previous device renounces its use – i.e. it will no longer accept or answer any calls made to the user’s phone number. Consequently, at no point in the claimed invention can a user use a plurality of terminals as attributed by the Applicant.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 3-7, 9-11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanchez Herrero et al. (U.S. Patent 7,177,642) in view of Chander et al. (U.S. Patent 6,778,828).

Regarding claims 1, 7, and 11:

Sanchez Herrero discloses a method, program, and apparatus for registering the position of wireless terminal equipment (wireless disclosed at col. 5, lines 20-50 and col. 7, lines 60-67), comprising: registering in a database personal information, the personal

Art Unit: 2435

information linking a subscribed terminal number, a terminal identification number and user charging information to biological information of a user possessing the wireless terminal equipment (the HSS: col. 8, lines 45-50); transferring subscribed telephone number and said first terminal identification information from among the personal information to an exchange which allows communication with the first wireless terminal equipment to request registration of position information permitting call in and call out of said first wireless terminal equipment by said subscribed telephone number (all of columns 10 and 11, but particularly col. 10, lines 10-30; telephone number as part of the registration at col. 4, lines 50-67); receiving from a second wireless terminal equipment an authentication request containing second terminal identification information for the second wireless terminal equipment (Ibid, but particularly col. 11, lines 15-40); retrieving personal information of the first wireless terminal equipment and updating the retrieved personal information by changing terminal information in the retrieved personal identification into the received terminal identification information (changing the active public-ID from the first to the second device: col. 11, lines 50-65); transferring the subscribed telephone number in the retrieved personal information and the changed terminal subscriber identification information in the updated personal information to the exchange and requesting position information registration which enables call in and call out as a terminal equipment having the subscribed terminal number (col. 11, line 65 – col. 12, line 5); and notifying a terminal equipment which has been used so far of renouncement of its use when the position information is requested of the exchange which enables call in and call out as a terminal equipment having the subscribed terminal number based on the authentication of biological information from a new terminal equipment by the received authentication request,

Art Unit: 2435

retrieved personal information, and the transferred subscribed terminal number (col. 13, lines 5-35).

Sanchez-Herrero does not disclose the use of biometric [“biological”] information as part of the process to register terminal equipment. However, Chander discloses an analogous method to register a phone to a user that links one’s biometric information such as a fingerprint, to other information such as the telephone number etc. as part of a two-factor authentication scheme (col. 10, line 50 – at least col. 11, line 60). It would have been obvious to incorporate biometric information as part of the mobile phone registration process disclosed by Sanchez-Herrero, as two-factor authentication was a known improvement that was clearly within the capabilities of one of ordinary skill in the art, to achieve the predictable result of more accurately identifying the user of the terminal equipment.

It is now taken as Applicant admitted prior art that Sanchez-Herrero’s HSS conforms to the “authentication server” of the claims and that the messages sent between it and the CSCF would comprise the features being claimed (see Sanchez-Herrero, col. 8, line 60 – col. 9, line 10; and col. 11, lines 40-50; cf. 3GPP TS 29.228, pages 8-23)

Regarding claims 3, 9, and 13:

Chander further discloses wherein the biological information received by the received authentication request is biological information read in real time into the terminal equipment (e.g. col. 11, lines 25-40).

Regarding claims 4, 10, and 14:

Art Unit: 2435

Sanchez-Herrero further disclose wherein the personal identification management step includes registering charged user identification information of a specific person among group members as common charged user identification of a plurality of terminal equipments owned by group members such that the specific person is charged (col. 5, lines 20-35).

Regarding claim 5:

It is now taken as Applicant admitted prior art that the wireless terminal equipment of the Sanchez-Herrero reference would likely be a cellular telephone. It is further observed that this is likely true of the Chander reference as well (preferred embodiments being GSM or other cellular terminals: col. 5, lines 50-67).

Regarding claim 6:

Chander further discloses wherein the biological information is a fingerprint, venous vascular network, palm print, palm shape, facial image, ear shape, or iris (e.g. col. 11, lines 25-40).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, all of which suggest the general obviousness of at least the independent claims:

- "Wireless Communications Principles and Practice, 2nd Edition" by Theodore Rappaport (see page 2, 2nd paragraph)
- "GSM Cellular Phone FAQs" (page 1, "What is a SIM card?")

Art Unit: 2435

- “Nextel Offers International Travelers Two New Phones; With Motorola P280 and v60, Nextel Customers use iDEN technology in United States and GSM Abroad” (page 1, 3rd through 5th paragraphs)
- “Vendors demonstrate CDMA/GSM roaming” (page 1, second-last paragraph)

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Gyorfí whose telephone number is (571)272-3849. The examiner can normally be reached on 9:30am - 6:00pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2435

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TAG

10/26/10

/Kimyen Vu/

Supervisory Patent Examiner, Art Unit 2435